

# Innovations

## Digital Business Model Innovation and Sustainability of Small and Medium Enterprises in South-East Nigeria

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**Abstract:** *The study examined the effect of Digital Business Model Innovation on Sustainability of Small and Medium Enterprises in South-East Nigeria. The specific objectives were to: ascertain the effect of e-commerce on innovation rate of SMEs, examine how digital marketing strategies enhance the profitability of SMEs, and assess the effect of digital payment systems on cash flow stability among SMEs. The study adopted survey research design with a total population of 9731 which was reduced to a manageable sample size of 370 respondents using Krejcie and Morgan Statistical Table. However, the study made use of 367 copies of duly completed and returned questionnaire for the analysis. The primary data collected were subjected to statistical test using ordinal logistic regression analysis with the aid of SPSS. Findings revealed that: (i) E-commerce had a significant effect on the innovation rate of SMEs in South East Nigeria, (ii) Digital marketing strategies significantly enhanced the profitability of SMEs in South East Nigeria, (iii) Digital payment systems significantly enhanced SMEs' cash flow stability in South East Nigeria, The study therefore concluded that Digital Business Model Innovation had a significant positive effect on the Sustainability of Small and Medium Enterprises in South-East Nigeria. Thus, the study, inter alia, recommended that SMEs in South-East Nigeria should embrace e-commerce platforms to drive innovation, expand their market reach, and enhance their competitiveness.*

**Keywords:** *Digital Business Model Innovation, Sustainability, SMEs*

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### 1.0 Introduction

Digital Business Model Innovation (DBMI) has become a essential force in reshaping how small and medium enterprises (SMEs) operate, particularly in developing economies like Nigeria. As digital technologies continue to evolve, including the expansion of mobile platforms, artificial intelligence, and big data, SMEs in Southeast Nigeria are presented with opportunities to innovate and sustain growth.

Unlike traditional business models, which largely rely on physical interactions, DBMI enables SMEs to leverage digital platforms for enhanced operational efficiency, customer engagement, and market expansion (Kagermann, 2020; Adewale, Olaniyi, & Ajayi, 2022).

SMEs in Southeast Nigeria contribute significantly to the region's economic development through job creation and poverty reduction (Eze, 2020). However, these enterprises face several constraints, including limited access to finance, insufficient infrastructure, and volatile market conditions, all of which impede their growth and sustainability (Egbuta & Okeke, 2021; Nwachukwu, 2021). In addition, SMEs in the region are challenged by the rapid pace of technological disruption, which necessitates a shift toward more resilient and adaptable digital business models (Kane, Palmer, Phillips, & Kiron, 2015). To remain competitive, SMEs must adopt digital technologies that promote innovation and sustainability (Teece, 2018).

The transformation towards digital business models in Southeast Nigerian SMEs has been influenced by the broader global trends of digitalization. With the increasing penetration of mobile internet, SMEs now have access to cost-effective digital tools that enhance their ability to interact with customers, streamline operations, and explore new revenue streams (Evans & Gawer, 2016). Additionally, e-commerce platforms and digital payment systems have enabled SMEs to broaden their customer base and improve financial inclusion (Nambisan, Zahra, & Luo, 2020; Schierz, Schilke, & Wirtz, 2010). However, challenges such as infrastructural deficiencies, high implementation costs, and a lack of digital literacy remain significant barriers to the adoption of these technologies (Onuoha & Okeke, 2023).

One of the key benefits of digital business model innovation is its ability to improve operational efficiency. Tools like enterprise resource planning (ERP) systems and customer relationship management (CRM) software enable SMEs to optimize resource utilization, reduce costs, and enhance decision-making (Kannan, 2017). Moreover, digital models facilitate business continuity, especially during external disruptions like the COVID-19 pandemic, by supporting remote work and flexible operations (Rogers, Mead, & Evans, 2021). This flexibility contributes to the resilience and sustainability of SMEs in uncertain times (Chesbrough, 2010).

Furthermore, DBMI plays a crucial role in market expansion and customer engagement. Digital platforms such as social media, e-commerce websites, and mobile applications allow SMEs to reach global markets, delivering personalized services through data-driven insights (Santana, Vargas, & Gomes, 2021). These innovations foster customer loyalty, drive sales, and enhance brand visibility, all contributing to long-term business sustainability (Zahra & Nambisan, 2021).

Despite these advantages, the path to digital adoption in Southeast Nigerian SMEs is not without challenges. The high costs of digital transformation, coupled with a lack of digital skills among SME owners and employees, pose significant obstacles

(Afuah, 2014; Nwankwo & Akpobi, 2018). Moreover, inconsistent internet connectivity and power supply hinder the effectiveness of digital solutions (Onyemaechi & Umeh, 2020). Addressing these barriers requires targeted interventions, including investment in digital infrastructure and capacity-building initiatives (Elkington, 1997). In other words, while digital business model innovation presents numerous opportunities for SMEs in Southeast Nigeria, understanding the extent of its impact on sustainability is crucial for enhancing the competitiveness and resilience of these enterprises (Zott & Amit, 2010; Teece, 2018).

This study therefore seeks to investigate the effects of DBMI on the sustainability of SME's in the region, focusing on key areas such as operational efficiency, market expansion, and financial stability. This objective was therefore guided by the following three research questions:

**RQ1:** How does e-commerce affect innovation rate of SMEs?

**RQ1:** How do digital marketing strategies affect the profitability of SMEs?

**RQ1:** How does payment system enhance cash flow stability of SMEs?

Through addressing of these research questions, this study aims to provide an insight into the interplay between Digital Business Model Innovation and Sustainability of Small and Medium Enterprises in South-East Nigeria. This led to the development of these three research hypotheses:

**H<sub>1</sub>:** E-commerce has a significant effect on the innovation rate of SMEs.

**H<sub>2</sub>:** Digital marketing strategies significantly enhance the profitability of SMEs.

**H<sub>3</sub>:** Digital payment systems significantly enhance SMEs' cash flow stability.

## **2.0 Literature Review**

### **2.1 E-commerce and Innovation Rate of SMEs**

E-commerce adoption has significantly influenced innovation among SMEs in South-East Nigeria by enhancing product development, service delivery, and operational efficiency (Awa & Ojiabo, 2022; Okafor, Nnaji & Anayo, 2021). Studies have shown that SMEs leveraging e-commerce platforms experience improvements in process and product innovation due to real-time customer feedback, cost reduction, and market expansion (Olaleye & Abimbola, 2023; Nwachukwu & Eze, 2020). However, firm size plays a crucial role, with medium-sized enterprises benefiting more from innovation than smaller firms due to better digital investment capacity (Adebajo, Onwuegbuchi & Ayinde, 2023). The role of infrastructure in moderating these effects is also evident, as technological, organizational, and environmental barriers hinder

e-commerce adoption, particularly in rural areas (Kinkani, Tumana & Gerendawele, 2024). Studies further indicate that e-commerce maturity enhances both innovation and business performance, emphasizing the need for SMEs to integrate advanced digital tools such as data analytics to improve competitiveness (Priambodo, Sasmoko, Abidinagoro & Bandur, 2022; Arsalan et al., 2022). Moreover, sustainable innovation strategies have been linked to customer satisfaction, highlighting the need for SMEs to strengthen their digital capabilities for long-term competitiveness (Olubiyi, 2022). Firm size also moderates the impact of e-commerce adoption, with smaller enterprises deriving higher financial performance gains than larger ones (Martini et al., 2023). Additionally, entrepreneurial orientation and market orientation significantly influence the effectiveness of e-commerce adoption in driving SME innovation and business performance (Octavia et al., 2020). Policy recommendations from these studies emphasize the need for improved internet infrastructure, IT skills training, and government incentives to enhance digital adoption. Strengthening collaboration between SMEs and e-commerce service providers is also crucial for sustaining innovation, while fostering an entrepreneurial mindset remains essential for maximizing the benefits of e-commerce-driven innovation in the SME sector.

## **2.2 Digital Marketing Strategies and Profitability of SMEs**

Digital marketing strategies have emerged as crucial determinants of SME profitability, particularly in Southeast Nigeria, where businesses are leveraging digital tools for competitive advantage. Research has consistently shown that digital marketing enhances financial outcomes, brand visibility, and customer engagement. Abbas et al. (2023) found that e-commerce and digital marketing significantly improved SMEs' financial performance, especially during economic downturns, although their impact on sustainability was less pronounced. Similarly, Muhammed and Yusuf (2023) confirmed that SMEs utilizing digital marketing, particularly social media campaigns and online advertising, recorded higher profitability levels. Digital media strategies have also been linked to improved customer engagement and profit margins, as evidenced by Akpan and Nwoke (2022), who highlighted the role of targeted social media marketing in driving SME success. Moreover, Adekunle and Egwu (2023) demonstrated that SMEs that adopted a comprehensive digital transformation approach, including social media and email campaigns, achieved enhanced brand visibility and financial success. Beyond visibility, digital marketing influences business sustainability. Bruce et al. (2023) established that while attitudes towards digital marketing varied, its actual use positively impacted SME sustainability in developing economies, emphasizing the role of subjective norms and behavioral intention in adoption. Lawal et al. (2021) further reinforced the argument that marketing strategies directly affect SME sustainability,

recommending structured orientation programs to enhance their effectiveness. However, challenges persist, as noted by Arobo (2022), who observed that many SMEs lack a clear digital marketing strategy, limiting their ability to maximize the benefits of digital platforms. Despite these challenges, research consistently affirms that digital marketing plays a critical role in enhancing SME performance, profitability, and sustainability, necessitating continuous adaptation and strategic investments in digital tools. Consequently, SMEs in Southeast Nigeria must integrate robust digital marketing strategies, including social media, email marketing, and search engine optimization, to enhance financial performance, increase market reach, and achieve long-term sustainability.

### **2.3 Payment System and Cash Flow Stability of SMEs**

Digital payment systems have been widely recognized for their role in enhancing the financial stability and cash flow management of SMEs. Studies have consistently shown that digital payment adoption significantly improves liquidity, reduces transaction delays, and strengthens financial resilience. Akintayo and Abioye (2023); and Nwokedi and Uche (2023) found that SMEs utilizing digital payment technologies experienced better financial stability, with enhanced cash flow management and liquidity. Similarly, Ibe and Ndubisi (2023) established that electronic payments contributed to financial resilience, enabling SMEs to withstand financial shocks. The findings of Okereke and Osagie (2022) further reinforce this argument, highlighting that digital payment systems enhance financial performance by ensuring seamless cash flow operations. Qualitative research by Okwu and Ifeoma (2022) emphasized the strategic importance of digital payments in reducing delays and improving overall financial efficiency. International studies align with these findings, as Phatak (2023) reported a significant positive impact of digital payment adoption on operational efficiency and transaction cost reduction in India, while Kilay et al. (2022) demonstrated that e-payment services optimize supply chain performance among MSMEs in Indonesia. Furthermore, the work of Umar et al. (2023) in Bauchi Metropolis underscored the role of cashless policies in driving SME performance and financial inclusion. Additionally, bibliometric analyses by Pellogrino and Abe (2022) highlighted the potential of digital financing solutions in supporting SMEs during financial crises. Despite these benefits, challenges such as security concerns and digital literacy gaps remain, as noted by Jenita et al. (2020). Thus, the consensus across studies suggests that SMEs should prioritize digital payment integration to enhance financial stability, operational efficiency, and long-term sustainability, while policymakers must address barriers to adoption through targeted interventions such as financial education, improved digital infrastructure, and regulatory support.

### 3.0 Methodology

The study adopted a survey research design. The target population of the study was 9731 SMEs in South-East Nigeria. The population distribution according the state includes: Abia – 2342, Anambra – 1504, Ebonyi – 2433, Enugu – 1432, and Imo – 2020. A sample size of 370 was determined using Krejcie and Morgan sample size table. The sample distribution according the state includes: Abia – 89, Anambra – 57, Ebonyi – 93, Enugu – 54, and Imo – 77. The study adopted stratified sampling technique to reach out to different strata using a structured questionnaire designed on a 5-point Likert scale. The validity of the instrument was measured using content validity. Both test-retest and Cronbach Alpha were used to test the reliability of the instrument which showed a coefficient of 0.883, indicating that the items were reliable. Descriptive statistics was used for data analyses while the inferential statistics was applied to test the hypotheses at 5% level of significance using Ordinal Logistic Regression.

## 4.0 Data Analysis, Results/ Implication and Discussion

### 4.1 Data Analysis

**4.1.1 Hypothesis 1:** E-commerce has a significant effect on the innovation rate of SMEs.

#### Pseudo R-Square for Hypothesis One

Cox and Snell	.679
Nagelkerke	.687
McFadden	.253
Link function: Logit.	

**Interpretation of Result of Hypothesis One:** From the model fitting information table, the result showed that the model is significant with 0.000 value which is less than the 5% (0.05) level of significance. McFadden coefficient of determination test shows that a positive prediction of 0.253 value, which is 25.3%.

**Decision:** In line with this result the study therefore reject the null hypothesis and conclude that E-commerce has a significant effect on the innovation rate of SMEs in South East Nigeria.

**4.1.2 Hypothesis 2:** Digital marketing strategies significantly enhance the profitability of SMEs.



<b>Pseudo R-Square for Hypothesis Two</b>	
Cox and Snell	.687
Nagelkerke	.694
McFadden	.256
Link function: Logit.	

**Interpretation of Result of Hypothesis Two:** From the model fitting information table, the result showed that the model is significant with 0.000 value which is less than the 5% (0.05) level of significance. McFadden coefficient of determination test shows that a positive prediction of 0.256 value, which is 25.6%.

**Decision:** In line with this result the study therefore reject the null hypothesis and conclude that Digital marketing strategies significantly enhance the profitability of SMEs in South East Nigeria.

**4.1.3 Hypothesis 3:** Digital payment systems significantly enhance SMEs' cash flow stability.

<b>Pseudo R-Square for Hypothesis Three</b>	
Cox and Snell	.669
Nagelkerke	.676
McFadden	.245
Link function: Logit.	

**Interpretation of Result of Hypothesis Three:** From the model fitting information table, the result showed that the model is significant with 0.000 value which is less than the 5% (0.05) level of significance. McFadden coefficient of determination test shows that a positive prediction of 0.245 value, which is 24.5%.

**Decision:** In line with this result the study therefore reject the null hypothesis and conclude that Digital payment systems significantly enhance SMEs' cash flow stability in South East Nigeria.

## **4.2 Discussion Findings and Implications**

### **4.2.1 E-commerce and Innovation Rate of SMEs**

The findings from the hypothesis test reveal that e-commerce has a significant effect on the innovation rate of SMEs in South-East Nigeria. This conclusion is in line with prior research that has highlighted the role of e-commerce in driving innovation within SMEs. Specifically, the McFadden coefficient of determination value of 0.253 indicates that e-commerce explains 25.3% of the variation in innovation rates, which

is statistically significant with a p-value less than the 5% threshold. This provides empirical support for the argument that the adoption and utilization of e-commerce by SMEs in South-East Nigeria can foster innovation in various aspects of their business processes.

The findings of this study align with several prior studies that have shown the positive relationship between e-commerce adoption and innovation within SMEs. For instance, Awa and Ojiabo (2022) observed that e-commerce adoption improved innovation, particularly in product development and service delivery among SMEs in Nigeria. Similarly, Okafor, Nnaji, and Anayo (2021) found that e-commerce platforms enhanced product and process innovation by facilitating real-time customer feedback, allowing SMEs to adapt quickly to market demands. This study further reinforces the idea that digital platforms enable businesses to become more responsive and innovative.

Moreover, Olaleye and Abimbola (2023) emphasized that e-commerce contributes significantly to innovation in resource-constrained economies like Nigeria, improving not only product design but also customer service. The findings in this study support their argument that e-commerce is a critical driver of innovation, especially in settings where businesses face infrastructural and financial challenges. The study also echoes Nwachukwu and Eze's (2020) finding that e-commerce platforms enhance SMEs' competitive advantage by enabling faster product introductions and improving customer engagement. These aspects of innovation contribute to SMEs' overall competitiveness in the market, as seen in this study's results. Similarly, Adebajo, Onwuegbuchi, and Ayinde (2023) found that e-commerce adoption improved innovation in supply chain management and customer service, suggesting that e-commerce is not only a tool for customer-facing innovation but also for operational efficiency and internal process improvements.

**Theoretical Support:** The findings of this study is also discussed in light of the theoretical frameworks that underpin the study, particularly the Dynamic Capabilities Theory, Resource-Based View (RBV), Technology Acceptance Model (TAM), Innovation Diffusion Theory (IDT), and Business Model Canvas (BMC).

- a. **Dynamic Capabilities Theory (DCT):** DCT suggests that firms must continuously reconfigure their resources and capabilities to adapt to changing environments. The positive relationship between e-commerce and innovation in this study reflects how SMEs are leveraging digital platforms to enhance their dynamic capabilities, particularly in terms of responsiveness to customer demands and market changes. This reconfiguration of business operations through digital tools supports the theory's assertion that firms must develop new capabilities to stay competitive.



- b. **Resource-Based View (RBV):** According to RBV, firms gain a competitive advantage by utilizing valuable, rare, and inimitable resources. E-commerce platforms serve as a critical resource that SMEs can leverage to innovate and improve their market positioning. The study supports RBV by demonstrating that SMEs in South-East Nigeria that adopt e-commerce are able to access a valuable resource—digital platforms—that helps them achieve greater innovation and improve their overall business performance.
- c. **Technology Acceptance Model (TAM):** TAM posits that perceived ease of use and perceived usefulness are key factors influencing the adoption of technology. The positive impact of e-commerce on innovation observed in this study is consistent with TAM, as SMEs that perceive e-commerce as useful for enhancing innovation are more likely to adopt and utilize digital tools effectively. As seen in Okafor, Nnaji, and Anayo's (2021) study, SMEs that use e-commerce for real-time feedback and customer engagement are better equipped to innovate in response to market needs.
- d. **Innovation Diffusion Theory (IDT):** IDT highlights the factors that influence how and why innovations are adopted across different contexts. The significant effect of e-commerce on innovation in this study aligns with IDT, which suggests that the adoption of innovations (e-commerce platforms in this case) is influenced by factors such as relative advantage, compatibility, complexity, and trialability. The findings suggest that SMEs in South-East Nigeria view e-commerce as advantageous for driving innovation, which facilitates its adoption and integration into their business models.
- e. **Business Model Canvas (BMC):** The BMC framework underscores the importance of digital tools in shaping a firm's business model, particularly in terms of value propositions, customer relationships, and revenue streams. The role of e-commerce in fostering innovation in this study mirrors the BMC's emphasis on how digital platforms can transform the way businesses create and deliver value. By adopting e-commerce, SMEs in South-East Nigeria have enhanced their innovation capabilities, improving their value propositions and customer engagement, which aligns with the BMC's framework for business model innovation.

#### **4.2.2 Digital Marketing Strategies and Profitability of SMEs**

The result of the hypothesis test shows that digital marketing strategies significantly enhance the profitability of SMEs in South East Nigeria, as evidenced by a model significance value of 0.000, which is well below the 5% threshold for significance, and a McFadden R-squared value of 0.256, indicating a positive predictive relationship of 25.6%. This supports the notion that digital marketing can play a crucial role in improving SME profitability in the region.

The findings of this study resonate with a number of prior studies that have explored the relationship between digital marketing and SME profitability. For instance: Abbas et al. (2023) found that digital marketing strategies, when combined with e-commerce, significantly enhanced the financial performance of MSMEs during the COVID-19 pandemic. This supports the claim in this study that digital marketing strategies positively affect SME profitability, particularly when the business environment is unstable.

Stevens (2022) also observed that SMEs employing digital marketing strategies, especially on social media, saw substantial improvements in brand awareness, customer engagement, and profitability. This aligns with the findings in the present study that digital marketing enhances SME profitability by expanding market reach and improving customer relations.

Muhammed and Yusuf (2023) confirmed that SMEs in South East Nigeria that utilized digital marketing strategies, particularly online advertising and social media campaigns, experienced higher profitability. Their findings reinforce the conclusion of this study that digital marketing strategies are essential tools for improving profitability.

Similarly, Akpan and Nwoke (2022) demonstrated that targeted digital media strategies contributed to higher profitability in South East Nigeria by improving customer engagement. Their findings emphasize the value of digital platforms for SMEs in achieving profitable outcomes, a theme echoed in the current study.

Adekunle and Egwu (2023) noted that SMEs that integrated digital marketing strategies, such as social media and email campaigns, experienced significant increases in profitability and brand visibility, which further supports the argument that digital marketing is a key driver of profitability for SMEs. Thus, the present study corroborates the existing literature that underscores the positive impact of digital marketing strategies on the profitability of SMEs.

**Theoretical Foundation:** The theories underpinning this study also provide a valuable lens through which to understand the significant effect of digital marketing strategies on profitability.

- a. **Dynamic Capabilities Theory** emphasizes that firms must possess the ability to sense opportunities, seize them, and reconfigure their resources to maintain competitiveness. Digital marketing strategies empower SMEs to continuously adjust and reconfigure their marketing tactics, enabling them to respond to market shifts and maintain a competitive edge. The significant positive relationship found in this study supports this view, as SMEs that utilize digital marketing strategies are more adaptive and responsive to customer demands and market trends.

- b. Resource-Based View (RBV) posits that firms with valuable, rare, inimitable, and non-substitutable resources can achieve sustained competitive advantages. Digital marketing tools, when strategically leveraged, can serve as unique resources that SMEs in South East Nigeria can use to build stronger customer relationships, enhance brand visibility, and ultimately drive profitability. The result of this study affirms that digital marketing strategies are valuable resources that contribute to the profitability of SMEs.
- c. Technology Acceptance Model (TAM) suggests that perceived ease of use and perceived usefulness influence the adoption of new technologies. The significant impact of digital marketing strategies in this study can be interpreted through the lens of TAM, as SMEs that perceive digital marketing as both easy to use and beneficial to their profitability are more likely to adopt and successfully implement such strategies.
- d. Innovation Diffusion Theory argues that innovations spread through a population, and their adoption depends on factors like perceived relative advantage, compatibility with existing practices, and observability of benefits. The findings of this study align with this theory, as SMEs that successfully adopted digital marketing innovations experienced enhanced profitability, highlighting the advantages and relevance of digital marketing in the contemporary business environment.
- e. Business Model Canvas (BMC), which provides a framework for identifying key business components such as customer value propositions, channels, and customer relationships, is also applicable. Digital marketing strategies allow SMEs to enhance their value propositions and customer engagement channels, directly influencing profitability. The significant positive effect of digital marketing on profitability can be attributed to its ability to optimize these business model components.

Implications for SMEs in South East Nigeria: The findings of this study have practical implications for SMEs in South East Nigeria. Given that digital marketing strategies are shown to significantly enhance profitability, SME owners should prioritize the adoption of digital tools and platforms such as social media, search engine optimization, and online advertising. Investment in digital marketing training for employees is also crucial to ensure that SMEs are able to maximize the potential of these strategies.

Furthermore, the results suggest that SMEs should continuously innovate and adapt their digital marketing strategies to remain competitive in the evolving digital landscape. Integrating digital marketing strategies with overall business models, as advocated by the Business Model Canvas, can help SMEs enhance customer engagement, increase brand visibility, and achieve sustained profitability.

#### 4.2.3 Digital Payment Systems and SME's Cash Flow Stability

The findings of this study suggest that digital payment systems significantly enhance SMEs' cash flow stability in South-East Nigeria, as evidenced by the statistical results of the hypothesis testing. With a model fitting significance of 0.000 (which is less than the 5% level of significance) and a positive prediction of 24.5%, it is evident that the adoption of digital payment systems plays a crucial role in improving cash flow stability for SMEs. These findings align with previous studies in the field, providing both a theoretical and empirical foundation for understanding the impact of digital payment systems on the financial stability of small and medium-sized enterprises (SMEs).

Akintayo and Abioye (2023) found that the adoption of digital payment systems positively influenced the financial performance of SMEs, particularly enhancing cash flow stability. Their findings mirrored those of the present study, suggesting that digital payment systems contribute to improved operational efficiency and, consequently, better financial management. The recommendation to integrate digital payment systems into SME operations aligns with this study's conclusion that SMEs can significantly benefit from such integration. Nwokedi and Uche (2023) also highlighted the positive effect of digital payment technologies on liquidity and cash flow management in small businesses. Their study in South-East Nigeria reported similar findings, further corroborating this research's conclusion that digital payment systems enhance SMEs' financial stability, making them more resilient to financial shocks.

Ibe and Ndubisi (2023) investigated the role of electronic payments in enhancing financial resilience and cash flow stability. Their conclusion that SMEs using electronic payments exhibited greater financial resilience resonates with the results of the present study, underscoring the importance of digital payment systems in bolstering SMEs' ability to manage their finances effectively. Okereke and Osagie (2022) also concluded that digital payment systems were pivotal in improving SMEs' financial performance and cash flow stability. Their findings underscore the broader consensus that digital payment adoption can significantly improve the operational efficiency and financial management of SMEs, especially in a rapidly evolving digital economy. Kilay, Simamora & Putra (2022) explored how digital payments influenced the performance of MSMEs, finding that e-payment adoption enhanced supply chain performance. Although their study was focused on Indonesia, the insights into digital payment systems' broader impact on performance are applicable to the Nigerian context, reinforcing the idea that digital payment adoption can drive efficiency and stability within SMEs.

**Theoretical Foundations:** The results of this study are anchored in several key theories, each of which provides a lens through which to understand the impact of digital payment systems on SMEs' financial stability.

- a. **Dynamic Capabilities Theory:** This theory emphasizes the ability of firms to adapt, integrate, and reconfigure internal and external competencies to address rapidly changing environments. The adoption of digital payment systems enhances SMEs' dynamic capabilities by improving their ability to manage cash flow effectively and respond to market changes swiftly. The significant improvement in cash flow stability observed in this study suggests that SMEs are leveraging digital tools to enhance their operational flexibility and responsiveness.
- b. **Resource-Based View (RBV):** According to RBV, firms gain a competitive advantage by effectively utilizing their resources. Digital payment systems represent a valuable resource for SMEs, enhancing their financial management and operational efficiency. The positive effect of digital payments on SMEs' cash flow stability in this study suggests that SMEs are leveraging digital technologies as a strategic resource to improve their financial performance.
- c. **Technology Acceptance Model (TAM):** TAM posits that perceived ease of use and perceived usefulness influence the adoption of new technologies. The results of this study suggest that SMEs in South-East Nigeria have found digital payment systems useful for enhancing their financial stability. This aligns with the TAM, as SMEs likely perceive digital payment systems as both useful and easy to adopt, leading to their widespread integration.
- d. **Innovation Diffusion Theory:** This theory posits that the adoption of new technologies is influenced by factors such as relative advantage, compatibility, and complexity. The positive results of this study suggest that digital payment systems provide a relative advantage by improving cash flow stability, and SMEs find these systems compatible with their operational needs. As the diffusion of digital payment technologies continues, SMEs in South-East Nigeria are likely to benefit further from these innovations.
- e. **Business Model Canvas (BMC):** The BMC emphasizes the importance of key partnerships, activities, and resources in a business model. Digital payment systems represent a crucial resource that enables SMEs to streamline their financial management activities. Through the adoption of digital payment systems, SMEs can improve their value propositions and operational activities, ultimately leading to enhanced financial stability.

**Implications for Practice:** The findings of this study have important practical implications for SMEs in South-East Nigeria. First, it is clear that the adoption of digital payment systems is not just a convenience, but a necessity for improving financial management and ensuring cash flow stability. SMEs that are slow to adopt

digital payment technologies may face challenges in managing cash flow effectively, which could undermine their long-term sustainability.

Second, the study's findings reinforce the importance of providing training and support to SMEs to ensure they fully understand the benefits and proper usage of digital payment systems. As seen in the research by Kilay, Simamora & Putra (2022), digital literacy and training programs can significantly improve SMEs' adoption and utilization of digital payment systems, leading to better financial management and business performance.

Also, policymakers and financial institutions should continue to promote the adoption of digital payment systems by SMEs, particularly in underserved regions like South-East Nigeria. Initiatives aimed at improving access to digital financial services, coupled with efforts to address security concerns, can further facilitate the adoption of these technologies.

## **5.0 Conclusion and Recommendation**

### **5.1 Conclusion**

This study examined the effect of Digital Business Model Innovation on the sustainability of Small and Medium Enterprises (SMEs) in South-East Nigeria and yielded significant insights into how digital strategies contribute to their growth and long-term viability. The findings demonstrated that e-commerce significantly enhances the innovation rate of SMEs, thereby increasing their competitiveness in the marketplace. Digital marketing strategies were found to have a positive impact on the profitability of SMEs, indicating that leveraging digital platforms can boost financial performance. Additionally, the adoption of digital payment systems was shown to stabilize cash flow, supporting consistent financial operations.

The study therefore emphasizes the critical role of digital transformation in promoting the sustainability of SMEs in South-East Nigeria. These findings suggest that SMEs in the region should prioritize the adoption of digital technologies to foster innovation, profitability, and sustainable growth.

### **5.2 Recommendations**

- i. SMEs in South-East Nigeria should embrace e-commerce platforms to drive innovation, expand their market reach, and enhance their competitiveness.
- ii. SMEs should adopt digital marketing strategies, such as social media and SEO, to increase brand visibility, customer engagement, and profitability.
- iii. SMEs should integrate digital payment systems to streamline financial transactions, improve cash flow stability, and reduce operational inefficiencies.



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